

WHAT IS CLAIMED IS:

1. A method for immunoisolation of a cell comprising:  
coating a cell/poly- $\beta$ -1-4-N-acetylglucosamine species, said  
5 cell/poly- $\beta$ -1-4-N-acetylglucosamine species comprising a  
poly- $\beta$ -1-4-N-acetylglucosamine species comprising about 4,000  
to about 150,000 N-acetylglucosamine monosaccharides  
covalently attached in a  $\beta$ -1-4 conformation, free of protein,  
substantially free of other organic contaminants,  
substantially free of inorganic contaminants, and having a  
10 molecular weight of about 800,000 daltons to about 30 million  
daltons within with at least one cell is encapsulated, with a  
coating having a polyelectrolyte charge opposite to the  
charge of the cell/poly- $\beta$ -1-4-N-acetylglucosamine species, so  
that the cell within the cell/poly- $\beta$ -1-4-N-acetylglucosamine  
15 species is immunoisolated.

2. The method of claim 1, wherein at least one  
acetylglucosamine monosaccharide of the poly- $\beta$ -1-4-N-  
acetylglucosamine species as been deacetylated.

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